Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	5	"5243187"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:32
S2	32	("4785242" "5130650" "5243187" "5434784 " "5491632" "5574361" "5602946" "567087 7" "5705924" "5719497" "5732372" "57676 44" "5831553" "5845619" "6265867" "6364 050").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/18 09:39
S3	180	(spiral cam) and 324/207.24,207.25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 18:45
S4	74	(spiral cam) with (magnet\$2 encoder ring) and 324/207.24,207.25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 18:47
S5	25	(spiral cam) with (magnet\$2 encoder ring) and 324/207.24,207.25.ccls. and bearing	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 18:47
S6	3	("5243187").URPN.	USPAT	OR	ON	2005/04/14 19:05
S8	39	"4785242"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 19:23
S9	20	("3728565"   "3819268"   "4166977"   "4241300"   "4258324"   "4280165"   "4288746"   "4319188"   "4326166"   "4359685"   "4369405"   "4370614"   "4480248"   "4481469"   "4490674"   "4506217"   "4506220"   "4506339"   "4518918"   "4677377").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/04/14 19:31
S10	118	position with "p" and 324/207.24,207.25. ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 21:37

S11	44	position with "p" and "p" with "a" and 324/207.24,207.25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 21:41
S12	17	"4982156"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 21:49
S13	0	324/207.25.ccls. and (calculat\$3 determin\$3 find\$3) with position same equ	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 21:49
S14	23	324/207.25.ccls. and (calculat\$3 determin\$3 find\$3) with position same "p"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/14 21:53
S15	24	324/207.25.ccls. and (calculat\$3 determin\$3 find\$3) with position with (equation formula)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ОИ	2005/04/14 21:54
S16	2	absolute near3 (position encoder) and (axial with (degrad\$3 inclin\$)) and 324/207.25. ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:38
S17	7	McDearmon-Graham-F.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:35
S18	10	VARONIS-ORESTES-J.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:36
S19	3	DENNY-WAYNE-V.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:37

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S20	5	SEVERYN-RAYMOND-A.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:37
S21	2	absolute near3 (position encoder) and (axial with (degrad\$3 inclin\$)) and 324/207.\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:38
S22	49	absolute near3 (position encoder) and (axial with (degrad\$3 inclin\$))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 15:39
S23	19	"4110727"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:00
S24	8	(notch cutout) same "360" and 324/207.25. ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:12
S31	101	SUZUKI-MASUMI.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:15
S32	7	S31 and encoder	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:20
S33	18	notch and absolute near2 position and 324/207.\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:20
S34	627	notch and absolute near2 position and (slop\$3 step\$3 degrad\$3 inclin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:22

635	410	624 and (mhast area day area)	LIC DODLID	OP	037	2005/04/15 17 22
\$35	412	S34 and (wheel encoder gear)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:22
S37	241	S35 and wheel	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:22
S38	123	notch and absolute near2 position and (slop\$3 step\$3 degrad\$3 inclin\$3) same (wheel encoder)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:26
S39	57	notch same (wheel encoder) and absolute near2 position and (slop\$3 step\$3 degrad\$3 inclin\$3) same (wheel encoder)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:22
S40	33	notch same (wheel encoder) and absolute near position and (slop\$3 step\$3 degrad\$3 inclin\$3) same (wheel encoder)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:23
S41	51	notch same (wheel encoder) and absolute near2 position and (slop\$3 step\$3 degrad\$3 inclin\$3) same (wheel encoder) and position with (measur\$4 detect\$3 determin\$)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:25
S42	39	S41 not arcade	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:25
S43	9	notch and absolute near position and 324/207.25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 17:28
S44	2	"04110727"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 18:07

S45	33	notch with (disc wheel encoder) and 324/207.25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 18:07
S46	53	(hall magneto\$ gmr coil winding) with (generat\$3 output signal pulse) with temperature and 324/207.24,25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/15 18:44
S47	1467	324/207.25.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/18 09:40
S49	811	S47 and (degrad\$3 inclin\$3 spiral\$3 curv\$3 slop\$3 step\$3 cam)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2005/04/18 09:41

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APPL-NO:

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INT-CL (IPC): G01D005/249

US-CL-CURRENT: 341/15

## ABSTRACT:

PURPOSE: To detect a position accurately by providing a converting means for converting a pattern, which shows existence of a notch of a disc by a predetermined bits, as the output signal of a magnetic sensor means to the absolute position signal which shows an absolute position of the disc.

CONSTITUTION: An A.B phase detecting magnetic sensor part 3 is provided in an encoder so as to detect a notch part by 4 bits of a Z phase disc 1 for detecting absolute position. 4 signals from this sensor part 3 are sent to a code converting unit 11 to be converted to the digital signal. The relation of a bit pattern of binary circulating random number sequence with an absolute position is memorized previously in this converting unit 11, and the absolute position signal Sab, which shows an absolute position within one rotation of a rotating shaft, is obtained on the basis of the pulse code of 4 bits of the signal from the sensor part 3, and is sent to an interpolation signal composing unit 10. In the composing unit 10, the signal Sab is added to the interpolation signal S from the interpolation signal converting unit 9 to be

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output as the high accurate absolute position signal.

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